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AMENDED SPECIFICATION

Reprinted as amended in accordance with the Decision of the Superintending Examiner acting for the Comptroller General dated the eighteenth day of October 1966, under Section 14, of the Patents Act, 1949.

PATENT SPECIFICATION

943,643

DRAWINGS ATTACHED

943,643

Inventors: EDWARD IAN WEIDNER
and GEORGE EDWARD SEARSON

Date of filing Complete Specification: May 19, 1961.

Applications Date: July 30, 1960. *Nos. 26626/60.*

Complete Specification Published: Dec. 4, 1963.

Index at acceptance:—E1 J(1H, 1Q)

International Classification:—E 04 f

COMPLETE SPECIFICATION

Improvements in or relating to Roof, Window and like Lights

We, CORDAR LIMITED, a British Company of 34 Dean Street, Newcastle upon Tyne, 1, England, do hereby declare the invention for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention is for improvements in or relating to roof light assemblies. The invention is more particularly although not necessarily exclusively concerned with roof lights of the character described and claimed in Patent Specification No. 829,442 of E. I. Weidner.

In Specification No. 829,442 there is described and claimed a roof light of dished or dome-like form and comprising an inner and outer shell spaced apart to provide a sealed cavity between them, said roof light having a surrounding flange which is seated on a frame or upstand and secured thereto.

One object of the present invention is to provide a frame, upstand or curb for a roof light having high insulating properties and also in some cases advantageous light reflecting properties.

According to the present invention there is provided a roof light assembly comprising a dome-like roof light having an inner and an outer shell spaced apart to provide a sealed cavity between them and mounted on an upstand frame or curb of frusto-conical, or frusto-pyramidal form and having a hollow cavity wall or walls, made of reinforced plastics or synthetic resin material.

In a preferred embodiment of the invention the inner and outer skins or shells of the hollow walled upstand, frame or curb are of resin bonded fibre glass.

The cavity or cavities in the hollow wall or walls of the upstand or curb may contain or be packed with a heat and/or sound insulating material and may be sealed in an airtight or substantially airtight manner. Conveniently such space, if any, as remains after the packing or filling with insulating material is filled with dry air or an inert gas. Various insulating materials may be used typical examples being granulated cork, glass wool, plastic foam or exfoliated vermiculite. It may be preferable to use an insulating material in block or slab-like form and of such a nature that it is relatively rigid. The insulation will then serve to reinforce the double skinned upstand or curb particularly in compression.

By making at least the inner skin or shell of the upstand or curb of a material suitably pigmented (e.g. with a white pigment) it can be given high and very advantageous light reflecting properties. Additionally or alternatively at least said inner shell or skin may be painted or otherwise coated, inside and/or outside, with a medium having good or high light reflecting properties.

The outer skin or shell of the upstand or curb may have a covering or coating of weather-proofing material and may be shaped so as to facilitate the securing of this weather-proofing material to it.

One particular embodiment of the invention will now be described, by way of example, with reference to the drawing accompanying the Provisional Specification which is a cross-

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sectional view through the wall of an upstand or curb.

In the following description reference is also made to the drawing accompanying the Complete Specification which shows a roof light, of the character described in Specification No. 829,442 fitted to the curb or upstand.

The curb or upstand shown in the drawings comprises an inner shell 10 and an outer shell 11, of for example resin bonded fibre glass or the like, bonded together at the lower or base flange 12 and the upper flange 13, preferably in an airtight or substantially airtight manner. It will be noted that the inner and outer shells are spaced apart to provide a cavity 14 between them.

This cavity is packed or filled with foamed plastic, foamed synthetic rubber or other insulating material. A convenient spacing apart of the inner wall 10 and outer wall 11 is ¾" or thereabouts.

The outer wall 11 has a covering or coating of weather-proofing material 15 and is recessed as indicated at 16. The weather-proofing material 15 is tucked into the recess 16 and the latter is then filled, partially filled or pointed-up with, for example, bitumen, cement or other suitable material as shown at 16*a*.

The outer skin or shell is grooved or corrugated as indicated at 19 so as to avoid slip or creeping of the weather-proofing 15.

A dome light L is mounted on the flange 13 and secured thereto by for example, bolts or other securing means, one such bolt being indicated at 17.

The lower flange 12 serves for mounting the upstand or curb on, for example, a roof or the like with the inner lower peripheral edge 18 in register with or otherwise appropriately located with respect to an opening in said roof or the like.

The joint between the inner and outer shells or skins of the upstand or curb may be made at the flange 12 or 13, as is shown in the case of the flange 13, said flange then only being integral with one of the said shells or skins, or both shells may be formed with a flange the two flanges being joined together to provide a double thickness flange as is shown in the case of the flange 12. Alternatively the flanges may be separate elements to which the inner and outer shells or skins are bonded.

The flange 12 and/or the flange 13 may be of hollow or cavity form and may be filled or packed with insulating material.

WHAT WE CLAIM IS:—

1. A roof light assembly comprising a dome-like roof-light having an inner and an outer shell spaced apart to provide a sealed cavity between them and mounted on an upstand, frame or curb of frusto-conical or frusto-pyramidal form, and made of reinforced plastics or synthetic resin material having a hollow or cavity wall or walls.

2. A roof light assembly as claimed in Claim 1 wherein the hollow or cavity wall or walls of the upstand frame or curb contain or are packed with a heat and/or sound insulating material.

3. A roof light assembly as claimed in claim 1 wherein the reinforced synthetic resin material is resin bonded fibre glass.

4. A roof light assembly as claimed in any of the preceding claims wherein the hollow or cavity wall or walls of the upstand frame or curb contain dry air or an inert gas.

5. A roof light assembly as claimed in claim 2 wherein the insulating material is granulated cork, glass wool, plastic foam or exfoliated vermiculite.

6. A roof light assembly as claimed in claim 2 wherein the insulating material is in the form of blocks, slabs or the like of a relatively firm, solid, unyieldable or rigid nature so as to reinforce the upstand or curb.

7. A roof light assembly as claimed in any of the preceding claims wherein the upstand or curb is provided with a flange at its upper part for mounting the roof-light on it.

8. A roof light assembly as claimed in any of the preceding claims wherein the upstand or curb is provided with a flange on its lower part for the mounting of it on a surface e.g. the roof of a building.

9. A roof light assembly as claimed in claim 7 or 8 wherein inner and outer skins or shells forming the hollow or cavity wall or walls of the upstand are extended so as to form the said flange or flanges.

10. A roof light assembly as claimed in any of the preceding claims wherein at least an inner skin or shell of the hollow or cavity wall or walls of the upstand or curb is formed of a material pigmented so as to give it good or high light reflecting properties.

11. A roof light assembly as claimed in any of the preceding claims wherein at least an inner shell or skin of the hollow or cavity wall or walls of the upstand or curb is painted or otherwise coated inside and/or outside with a medium having good or high light reflecting properties.

12. A roof light assembly as claimed in any of the preceding claims wherein the upstand or curb has its outer surface covered or coated with weather-proofing material said outer surface being grooved, corrugated or otherwise formed so as to prevent slip or creeping of the weather-proof covering or coating.

13. A roof light assembly as claimed in claim 12 wherein the upstand or curb has a recess or recesses or the like into which the weather-proofing material is or may be tucked said recess or recesses being adapted to receive a filling of bitumen, cement or like material.

14. A roof-light assembly substantially as herein described with reference to the accompanying drawing.

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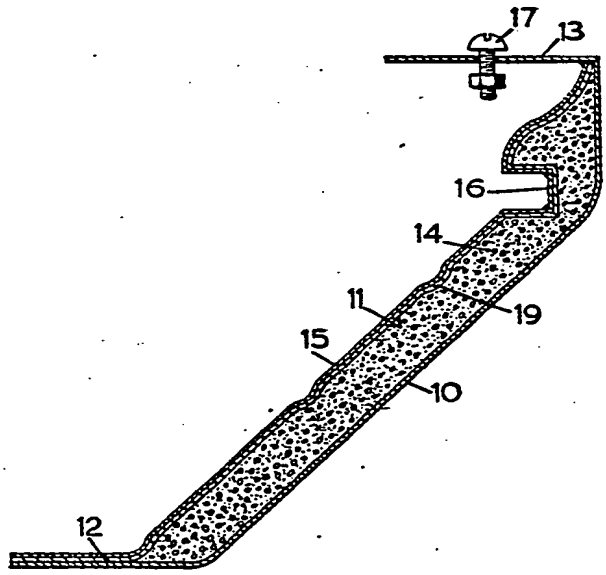
943643 PROVISIONAL SPECIFICATION
1 SHEET *This drawing is a reproduction of the Original on a reduced scale*



943643
1 SHEET

AMENDED SPECIFICATION

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